Work Order ID 124259

September-11-14 12:00:17 PM

124259

Item ID: D3639-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Doubler

Start Date: 9/10/14 **Start Qty:** 4.00 *4*

Required Date: 9/10/14 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** MLJ **Date:** 4-09-16 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr / **Revision Nbr**: D3639 / Rev A									
100	FLOW WATER JET	0.00				5		DL 14/10/14	
100 Waterjet	**Memo**	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D3639 Dwg Rev: A Prog Rev: A 2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00				5		2/DL 14/10/14	
110 QC	**Memo**	0.00							
Quality Control									
120	QC8- Inspect parts - second check	0.00				(5)			DAS 38
120 QC	**Memo**	0.00							OCT 20 2014
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

_____
_____
_____

Work Order ID 124259

September-11-14 12:00:17 PM

124259

Item ID: D3639-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Doubler

Start Date: 9/10/14 **Start Qty:** 4.00 *4*

Required Date: 9/10/14 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00			DAS 30 9-89	5			14/10/23
130	NC BRAKE								
Brake NC	**Memo**	0.00							
Brake NC	Form as per Dwg D3639								
140	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
140						(5)			
QC	**Memo**	0.00							OCT 24 2014
Quality Control									
150	Chemical Conversion Coat per QSI005 4.1	0.00				x5			14/10/28
150									
HandFinish	**Memo**	0.00							
Hand Finishing									

DQA: _____ Date: _____

DART AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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General

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☐ BOM/Route
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☐ Hardware
☐ Inspection Incomplete/Unqualified
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☐ Misread
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☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

_____
_____
_____

Work Order ID 124259 *124259*

September-11-14 12:00:17 PM

Item ID: D3639-1 **Accept** *N9000040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Doubler

Start Date: 9/10/14 **Start Qty:** 4.00 *4*

Required Date: 9/10/14 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC7 Inspect Part Finish	0.00				(5)			DAS 38 9-89
160									
QC	**Memo**	0.00							
Quality Control									

OCT 2 8 2014

170 Identify as per dwg & Stock Location 81054 0.00

170

Packaging **Memo** 0.00

Packaging

5x Sp 14-10-28

180 QC21- Final Inspection - Work Order Release 0.00

180

QC **Memo** 0.00

Quality Control

14/10/29

14.10.29

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Broken/Damage/Defect
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☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
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☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

_____
_____
_____

Picklist Print

September-11-14 12:00:16 PM

Work Order ID: 124259 *124259*

Parent Item: D3639-1 *D3639-1*

Parent Item Name: Doubler

Start Date: 9/10/14 **Required Date:** 9/10/14

Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP Rev:A New Issue 07-07-20 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050		Purchased	No			100	sf	89.8911	0.239	2			
M2024T3S.050									**				
2024-T3 .050 sheet													

Location	Loc Qty	Loc Code		
MAT022	89.8911			
124643	37.2911			
m128354	42.2			1.666
m128713	10.4			

DL 14/10/19

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

_____
_____
_____

DART AEROSPACE LTD	Work Order:	124259
Description: Doubler	Part Number:	D3639-1
Inspection Dwg: D3639 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [ ] Prototype

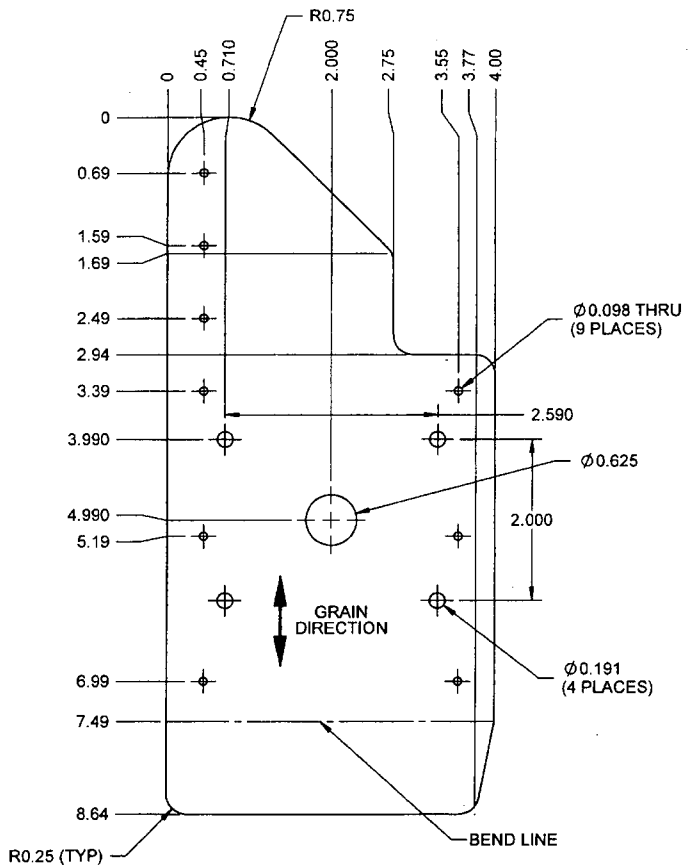
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.625	+0.008/-0.001	.624	✓		V:JKM-01	
Ø0.191	+0.005/-0.001	.191	✓		T:JKM-06	
Ø0.098	+0.004/-0.001	.098	✓			
0.69	+/-0.030	.69	✓			
1.59	+/-0.030	1.59	✓			
2.49	+/-0.030	2.49	✓			
3.39	+/-0.030	3.39	✓			
3.990	+/-0.010	3.990	✓			
4.990	+/-0.010	4.990	✓			
5.19	+/-0.030	5.19	✓			
6.99	+/-0.030	6.99	✓			
8.64	+/-0.030	8.64	✓			
0.45	+/-0.030	.45	✓			
0.710	+/-0.010	.710	✓			
2.000	+/-0.010	2.000	✓			
2.75	+/-0.030	2.75	✓			
3.55	+/-0.030	3.55	✓			
4.00	+/-0.030	4.00	✓			
2.000	+/-0.010	2.000	✓			
2.590	+/-0.010	2.590	✓			

Measured by:	[illegible] 14/10/19
Date:	

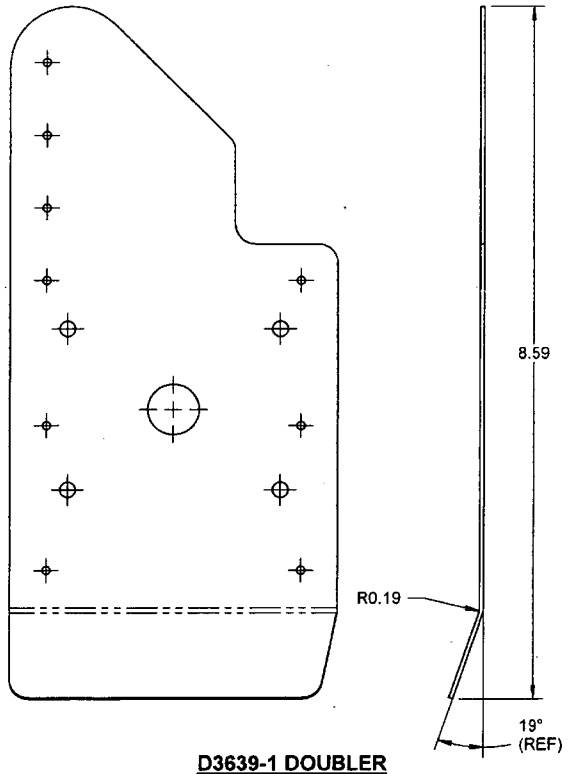
Audited by:	DAS 38 9-89
Date:	OCT 20 2014

Prototype Approval:	N/A
Date:	N/A

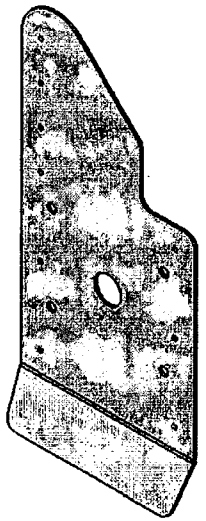
Rev	Date	Change	Revised by	Approved
A	07.10.19	New Issue	KJ/EC/DD	



D3639-1F FLAT PATTERN
(D3639-2F OPPOSITE)



D3639-1 DOUBLER
(WAS GENEVA P/N G10604-3)
D3639-2 OPPOSITE
(WAS GENEVA P/N G10604-6)



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 124259 MLJ
14-09-16

RELEASED
07.29.07

NOTES:
1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.050 THICK PER QQ-A-250/4 OR AMS 4037
(REF DART SPEC M2024T3S.050)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3639-1/-2" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.14 lbs

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE; REPLACES G10604	LE	07.07.27

DESIGN	TS	DART AEROSPACE USA, INC.
DRAWN		PORT HADLOCK, WA
CHECKED		DRAWING NO. D3639 REV. A
MFG. APPR.		SHEET 1 OF 2
APPROVED		TITLE DOUBLER SCALE 2:3
DE APPR.		
DATE	07.07.27	

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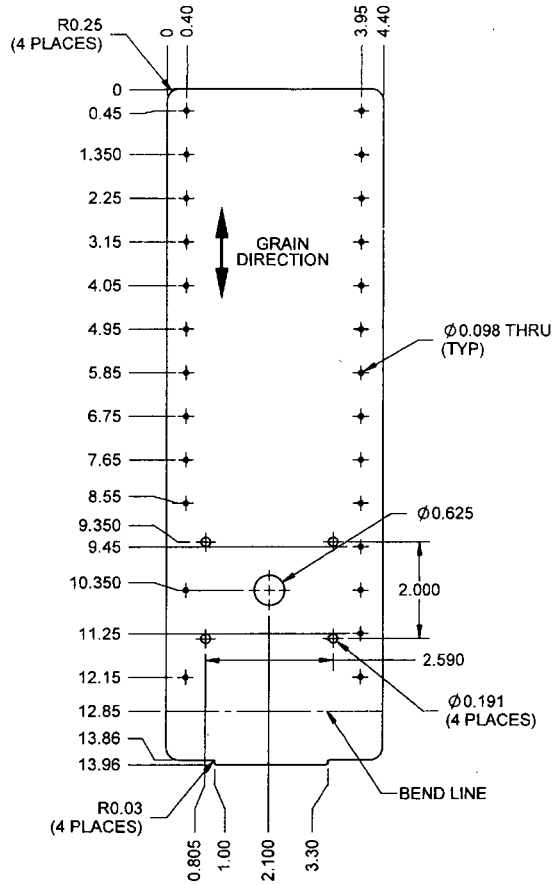
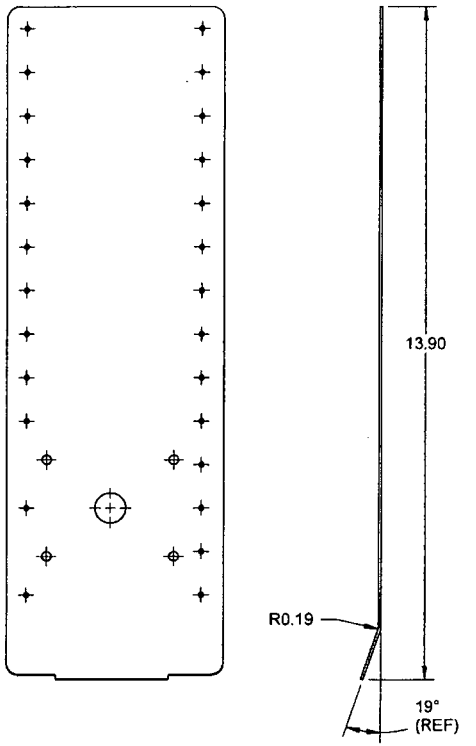
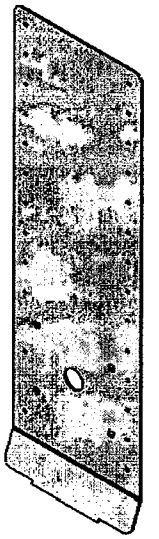


D3639-3F FLAT PATTERN
(D3639-4F OPPOSITE)





D3639-3 DOUBLER
(WAS GENEVA P/N G10604-4)
D3639-4 OPPOSITE
(WAS GENEVA P/N G10604-5)

RELEASED
07.09.07

NOTES:
1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.050 THICK PER QQ-A-250/4 OR AMS 4037
(REF DART SPEC M2024T3S.050)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3639-3/-4" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.3 lbs

DESIGN	TS	DART AEROSPACE USA, INC.
DRAWN		PORT HADLOCK, WA
CHECKED		DRAWING NO. D3639 REV. A
MFG. APPR.		SHEET 2 OF 2
APPROVED		TITLE DOUBLER SCALE 2:5
DE APPR.		
DATE	07.07.27	

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